MIAMI-DADE COUNTY PRODUCT CONTROL SECTION 11805 SW 26 Street, Room 208 Miami, Florida 33175-2474

T (786) 315-2590 F (786) 315-2599 www.miamidade.gov/economy

NOTICE OF ACCEPTANCE (NOA)

Armor Screen Corporation 2744 Hillsboro Road West Palm Beach, FL 33405

Scope:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER- Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: "Armor Screen Series 2000" Flexible Wind Abatement System

APPROVAL DOCUMENT: Drawing No. AS-001, titled "Armor Screen Series 2000 Flexible Wind Abatement/ Impact Protection System", sheets 1 through 9 of 9, prepared by Armor Screen Corporation, last revision dated June 06, 2013, signed and sealed by Eugenio M. Santiago, P.E., on June 19, 2013, bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and the expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LABELING: Each screen shall bear a permanent label with the manufacturer's name or logo, city, state, the following statement: "Miami-Dade County Product Control Approved", and NOA number, per TAS-201, TAS-202, and TAS-203, unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA revises & renews NOA # 12-0223.12 and consists of this page 1, evidence submitted pages E-1, E-2, & E-3 as well as approval document mentioned above.

The submitted documentation was reviewed by Helmy A. Makar, P.E., M.S.

MIAMI-DADE COUNTY
APPROYED

He G. A. Nelon 10/17/2013

NOA No. 13-0710.01 Expiration Date: 01/07/2019 Approval Date: 10/17/2013

Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 99-0526.01

A. DRAWINGS

1. Drawing No. AS-001, titled "Armor Screen Series 2000 Wind Abatement System", prepared by Thomas J. Rogers, P.E., dated June 28, 1998, sheets 1 through 6 of 6, signed and sealed by Thomas J. Rogers, P.E.

B. TESTS

- 1. Test report on Large Missile Impact Test and Cyclic Wind Pressure Test of Armor Screen Series 2000 Wind Abatement System, prepared by Hurricane Test Laboratory, Inc., Report No. 0139-0305-98, dated July 23, 1998, signed and sealed by Timothy S. Marshall, P.E.
- 2. Test report on Static Wind Pressure Test of Armor Screen Series 2000 Wind Abatement System, prepared by Hurricane Test Laboratory, Inc., Report No. 0139-0604-98, dated July 23, 1998, signed and sealed by Timothy S. Marshall, P.E.
- 3. Test report on Large Missile Impact Test and Cyclic Wind Pressure Test of Armor Screen Series 2000 Wind Abatement System, prepared by Hurricane Test Laboratory, Inc., dated November 24, 1998, signed by Vinu J. Abraham.

C. CALCULATIONS

- 1. Anchor calculations, dated July 14, 1998, pages 1 through 10 of 10, prepared by Thomas J. Rogers, P.E., signed and sealed by Thomas J. Rogers, P.E.
- 2. Anchor calculations, dated October 4, 1999, pages 1 through 6 of 6, prepared by Thomas J. Rogers, P.E., signed and sealed by Thomas J. Rogers, P.E.

D. MATERIAL CERTIFICATIONS

- 1. Mill certified Inspection Report with chemical composition and physical properties of Woven Monofilament Geotextile.
- 2. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #03-1204.01

A. DRAWINGS

- 1. None.
- B. TESTS
 - 1. None.
- C. CALCULATIONS
 - 1. None.

D. MATERIAL CERTIFICATIONS

None.

Helmy A. Makar, P.E., M.S. Product Control Unit Supervisor

NOA No. 13-0710.01 Expiration Date: 01/07/2019 Approval Date: 10/17/2013

Approvarba

Armor Screen Corporation

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

- 3. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #07-0424.04
- A. DRAWINGS
 - 1. None.
- B. TESTS
 - None.
- C. CALCULATIONS
 - 1. None.
- D. QUALITY ASSURANCE
 - 1. By Miami-Dade County Building Code Compliance Office.
- E. MATERIAL CERTIFICATIONS
 - 1. None.
- 4. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 08-1008.03
- A. DRAWINGS
 - 1. None.
- B. TESTS
 - 1. Test report on Large Missile Impact Test, Cyclic Wind Pressure Test, and Static Wind Pressure Test of Armor Screen Series 2000 Wind Abatement System, prepared by Fenestration Testing Laboratory, Inc., Report No. 5651-02, dated June 21, 2008, signed and sealed by Carlos S. Rionda, P.E., and Michael Wenzel. P.E.
- C. CALCULATIONS
 - 1. None.
- D. QUALITY ASSURANCE
 - 1. By Miami-Dade County Building Code Compliance Office.
- E. MATERIAL CERTIFICATIONS
 - 1. None.

Helmý A. Makar, P.E., M.S. Product Control Unit Supervisor

> NOA No. 13-0710.01 Expiration Date: 01/07/2019 Approval Date: 10/17/2013

E - 2

Armor Screen Corporation

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

5. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 12-0223.12

A. DRAWINGS

1. Drawing No. AS-001, titled "Armor Screen Series 2000 Flexible Wind Abatement/Impact Protection System", sheets 1 through 8 of 8, prepared, signed and sealed by Gary D. Foreman, P.E., last revision dated May 17, 2012.

B. TESTS

1. Test report on Self-Ignition Temperature, Rate of Burning, and Smoke Density test of Composite Material (Armor Screen Series 2000 Wind Abatement System), prepared by Hurricane Engineering & Testing, Inc., Report No. HETI-12-F105, dated April 11, 2012, signed and sealed by Rafael E. Droz-Seda, P.E.

C. CALCULATIONS

1. None.

D. QUALITY ASSURANCE

1. By Miami-Dade County Department of Permitting, Environment, and Regulatory Affairs.

E. MATERIAL CERTIFICATIONS

1. None.

F. OTHERS

1. Letters from David M. Jones of Tencate, dated April 02 & 14, 2012, certifying the Weathering Test Per G154 (5100 hours at 92% tensile retention) performed is harsher than G155 (4500 hours) required.

6. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. Drawing No. AS-001, titled "Armor Screen Series 2000 Flexible Wind Abatement/ Impact Protection System", sheets 1 through 9 of 9, prepared by Armor Screen Corporation, last revision dated June 06, 2013, signed & sealed by Eugenio M. Santiago, P.E., on June 19,2013,

B. TESTS

1. None.

C. CALCULATIONS

1. None.

D. OUALITY ASSURANCE

By Miami-Dade County Department of Regulatory and Economic Resources.

E. MATERIAL CERTIFICATIONS

1. None.

Helmy A. Makar, P.E., M.S. Product Control Unit Supervisor

NOA No. 13-0710.01

Expiration Date: 01/07/2019 Approval Date: 10/17/2013

GENERAL NOTES:

- This Wind Abatement / Impact Hurricane Protection System is designed and tested to comply with the High Velocity Hurricane Zone (HVHZ) of the Florida Building Code, 2007 and 2010 Editions.
- For use with 2010 FBC, the design pressures as determined from Section 1620 and ASCE 7-10 must be multiplied by 0.6.
- Testing meets the current Florida Building Code; TAS 201; TAS 202; TAS 203 and fulfills its requirement for opening protection.
- The unbreached envelope criterion is met when this approved wall component encloses the protected opening all around.
- The open areas in the Armor Screen Fabric are small enough that the surface tension of water causes the barrier screen to become solid in the presence of rain, and in actual hurricane conditions has been shown to prevent damaging voluminous water intrusion, even from torrential rains.
- Has satisfied checklist #0445 for resistance to burning, smoke, ignition, temperature, and weathering and qualifies as a permanently installed building component; ASTM G155, ASTM D638, ASTM C158, ASTM D635 - C1, ASTM D1929 ASTM D2843.
- Product Marking: A permanent label shall be affixed to the screen barrier with the following statement: "Armor Screen Corporation, Current Address, Miami-Dade County Product Control Approved, Patented and Patents Pending, US Patent No. 6176050".

INSTALLATION NOTES:

- Deflection is the minimum glass separation measured at mid span of the screen and subject to interpolation between listed spans. Separation offset may be achieved alone or by any combination thereof, Natural Deflection, Angled Style Screens, Storm Bars and
- Screen may be mounted with opposing primary anchored perimeters (span) in vertical, horizontal, or any alignment appropriate to the structure being protected.
- The screens may be installed at any height on the structure as long as the design pressure rating for the screens is not exceeded.
- Anchors on the non-primary perimeter side (span side) of the screen are optional (e.g. to limit potential sag in the screen or reduce movement on the free side or other site specific reasons).
- The thickness of typical facing materials i.e. stucco, siding, stone, brick, pavers, etc. are not to be considered part of the anchor embedment. Longer fasteners should be used to allow for facing materials.
- Anchor embedment into masonry shall be into the face shell, not mortar joints.
- All fully embedded anchors may be flush with the finished facing provided they have the correct embedment into the structure behind the finish material.
- Anchor installations should follow the manufacturer's recommended methods.
- A caulk or sealant should be used with all wood penetrating anchors.
- All fasteners shall be corrosion resistant as specified in the IRC and IBC or stainless steel.

PRODUCT DATA:

The woven geotextile fabric shall have the following minimum average roll values:

Grab Tensile Strength	(ASTM D4632)	425 x 325 LBS
Puncture Strength	(ASTM D4833)	130 LBS
Mullen Burst	(ASTM D3786)	675 PSI
Trapezoidal Tear	(ASTM D4533)	150 x 125 LBS
Wide Width Tensile Strength	(ASTM D4595)	225 x 205 LBS/IN
Wide Width Elongation	(ASTM D4595)	22 x 21%
Apparent Opening Size	,	30 US STD SIEVE.
Percentage of Open Area		5%

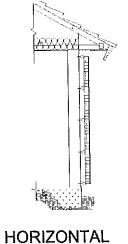
Screen unable to return should extend past protected opening by distance equal to minimum required deflection.

ALL GEOSYNTHETIC HURRICANE SCREEN ASSEMBLY INSTALLATION DETAILS DEPICTED WITHIN THESE DRAWINGS ARE TYPICAL FOR THE INSTALLATION OF THIS WIND ABATEMENT AND IMPACT PROTECTION

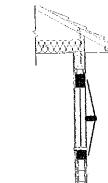
SYSTEM ONLY. ALL OTHER BUILDING COMPONENTS SHOWN HEREIN ARE DEPICTED AS EXISTING, AND

• ASTM G155

- ASTM D638
- ASTM C158 • ASTM D635 - C1
- ASTM D1929
- ASTM D2843



Examples of typical installations

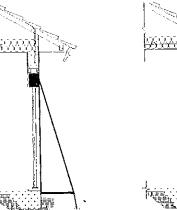


VERTICAL

BALCONY

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STORM BAR

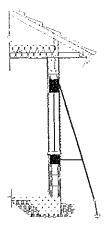


ANGLED



INVERTED

RENDERING NOT TO SCALE



WINDOW

2003 © ARMOR SCREEN CORPORATION

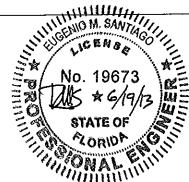
SHEET NO. 1 OF 9 DWG NO. AS-001 Drawn I S S TG, 10- \aleph

EUGENIO M. SANTIAGO, PE 77 HARBOR DR #26 KEY BISCAYNE, FL 33149 (305) 322-9775

NOT CONSTRUCTED BY THE SCREEN COMPANY.

PRODUCT: ARMOR SCREEN SERIES 2000 FLEXIBLE WIND ABATEMENT / IMPACT PROTECTION SYSTEM 2744 HILLSBORO RD, WEST PALM BEACH, FL 33405

PH: (561)841-8890 FAX: (561)841-8892 SALES@ARMORSCREEN.COM



PRODUCT REVISED as complying with the Florida Building Code Acceptance No 3 Expiration Date Q1

November 25, 2003 EVISIONS ₹ 22, 2001

Table 1 Span in feet 1 2 2 2 2 2 9 8 8 8 8 9 9 9 0 **Deflection** in inches Anchor Spacing
1' 0/C 2' 0/C
Design pressure ** 130 130 115 68.75 130 130 94.75 120 69.75 130 130 120 64.75 130 60 130 34.25 29.00 24.00 3/₈" open eye -* %" bolt Anchor Choices *
2* 3* × open eye l×l× $|\times|\times|\times$

REVISIONS

OCTOBER 22, 2001

August 27, 2003

November 25, 2003

February 17, 2012

June 6, 2013

CONCRETE: *Table is intended for drop-in and LDT an WOOD: Lag anchoring (incl. LDT) into wood as follows *Table is intended for drop-in and LDT anchors in concrete.

Column 1*: 3/8" thread, 1.75" penetration into SYP (0.55sg)
Column 2*: 3/8" thread, 3.1" penetration into SYP
Column 3*: ½" thread, 3.0" penetration into SYP
Column 4*: ½" thread, 3.7" penetration into SYP
EARTH: * Specified earth anchor may be used with any of table choices.

HOLLOW BLOCK: Column 1*, approved epoxy anchoring system for $\frac{3}{8}$ " & ½" thread. NOTE: **Design pressure may be increased by 5% for negative loads.

TRACK SYSTEM: Table applies to track system, anchored with two $\frac{5}{16}$ " fasteners per cleat, as follows:

- into hollow block, min. 1 ½" embed can be installed as in column 1* - into concrete, min. 1 ¾" embed can be installed as in column 3* - into concrete, min. 2" embed can be installed as in column 4* - into wood (SYP. sg. 0.55), min. 1" embed can be installed as in column 3* - into wood (SYP. sg. 0.55), min. 2" embed installed as in column 3* 1" embed can be installed as in column 1* 2" embed installed as in column 3*

NOTES:

Anchor Spacing: varies inversely with pressure and is subject to rational analysis. Span: is measured anchor to anchor and is subject to rational analysis. Deflection: is minimum glass separation measured at mid-span of screen and is subject to rational

analysis.
ANCHOR SPECIFICATION:

Lag Anchors:

Drop-in Anchor: 3/8" Lag Anchor
2" Lag Anchor
2" Lag Anchor
Tapcon 5/6", 3/8", or 2/2" LDT can anchor in both wood and concrete
3/8" Steel Drop-in anchor in 3000 PSI (min.) concrete, 1 5/8" min.
embedment, 3 3/4" min. edge distance (Powers or equal)

½" Steel Drop-in anchor in 3000 PSI (min.) concrete, 2" min. embedment, 5" min. edge distance (Powers or equal)

Proprietary System: Stabilized ½" x 30" Shaworking Load of Earth Anchor is 3150 LBS. Stabilized ½" x 30" Shaft with 4" helix

Soil Class: 5 (medium dense coarse sand)

Equal to Red Head umbrella inserts and screens with C7 adhesive

Epoxy Anchor:

Earth Anchor:

DWG NO. SHEET NO. AS-001 2 OF 9

SCALE: Drawn by:

NO SCALE

TG, 10-22-01

PRODUCT REVISED as complying with the Florida Building Code Acceptance No 13-0716 Expiration Date 01/07/2019 Miami Dade Product Control

No. 19673

No. 19673

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STATE OF

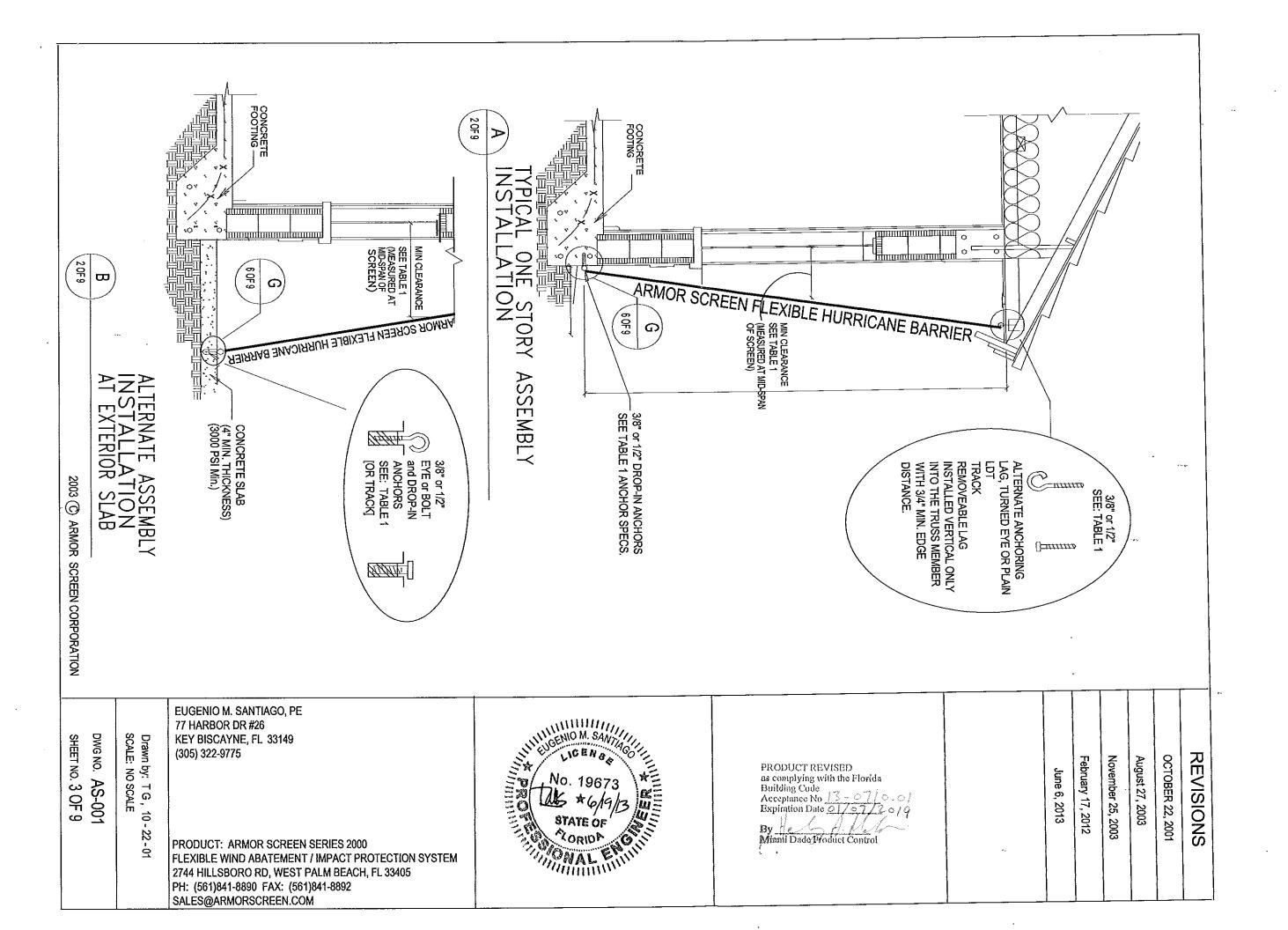
ONDA

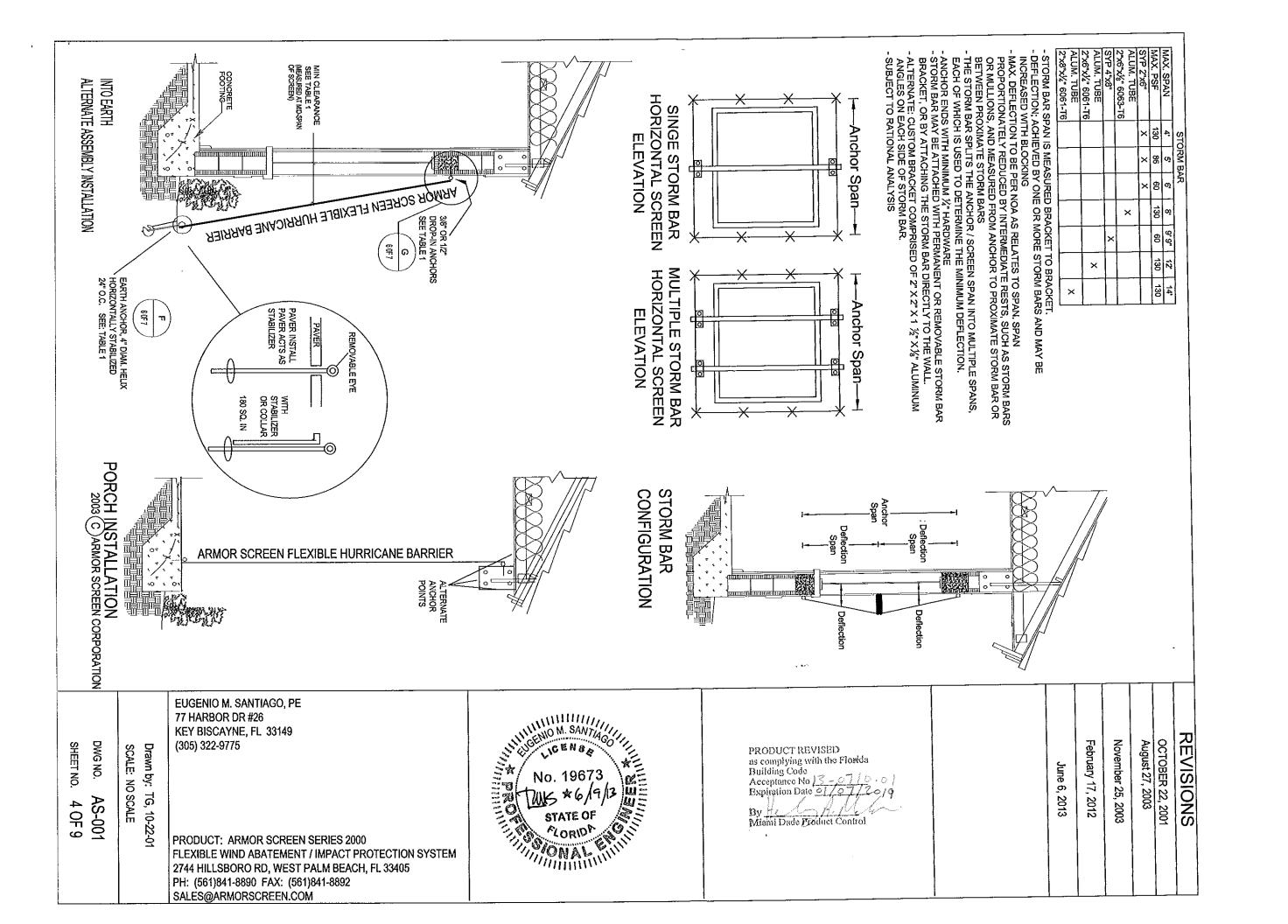
KEY BISCAYNE, FL 33149 (305) 322-9775 PRODUCT: ARMOR SCREEN SERIES 2000 FLEXIBLE WIND ABATEMENT / IMPACT PROTECTION SYSTEM 2744 HILLSBORO RD, WEST PALM BEACH, FL 33405 PH: (561)841-8890 FAX: (561)841-8892

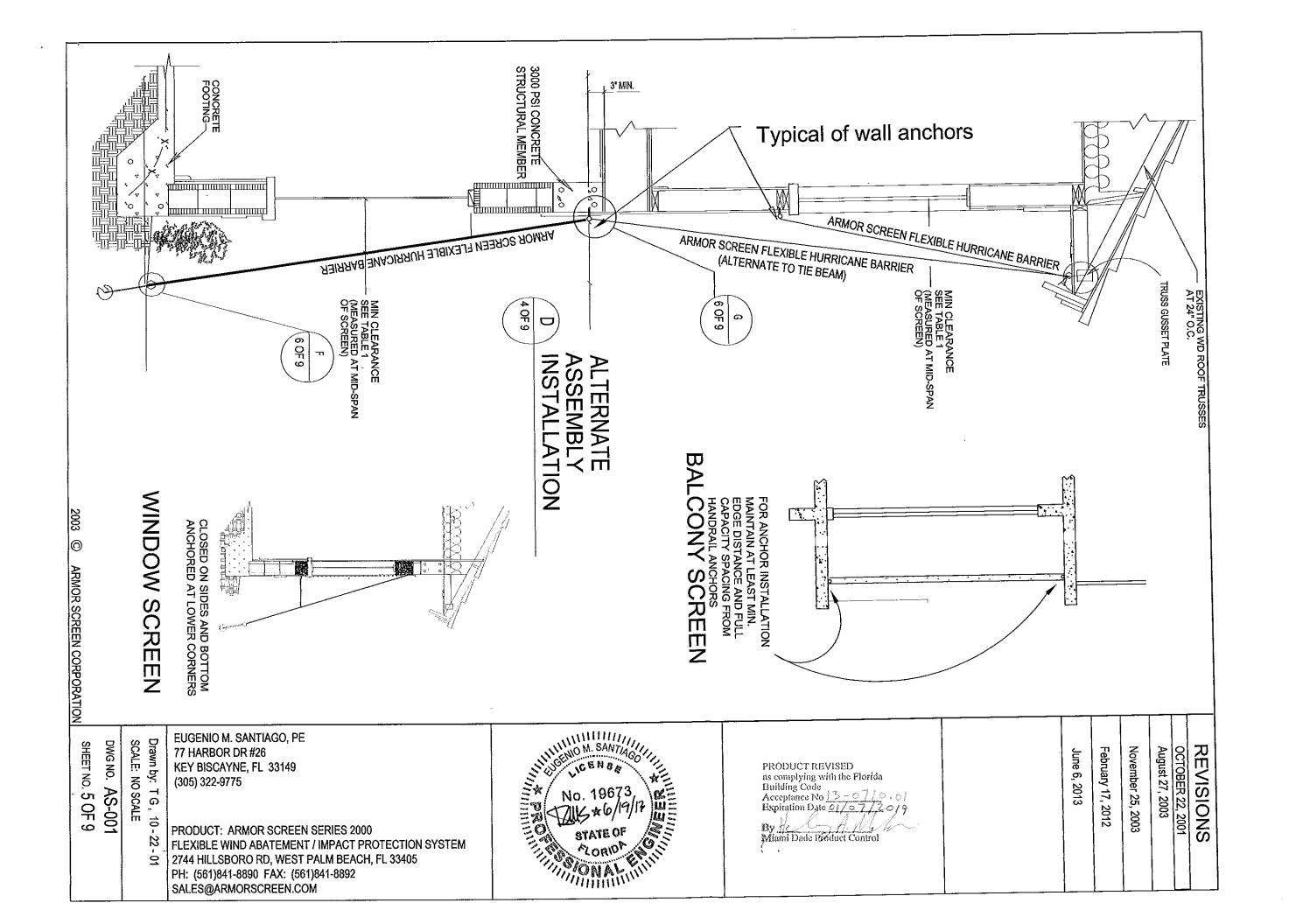
EUGENIO M. SANTIAGO, PE

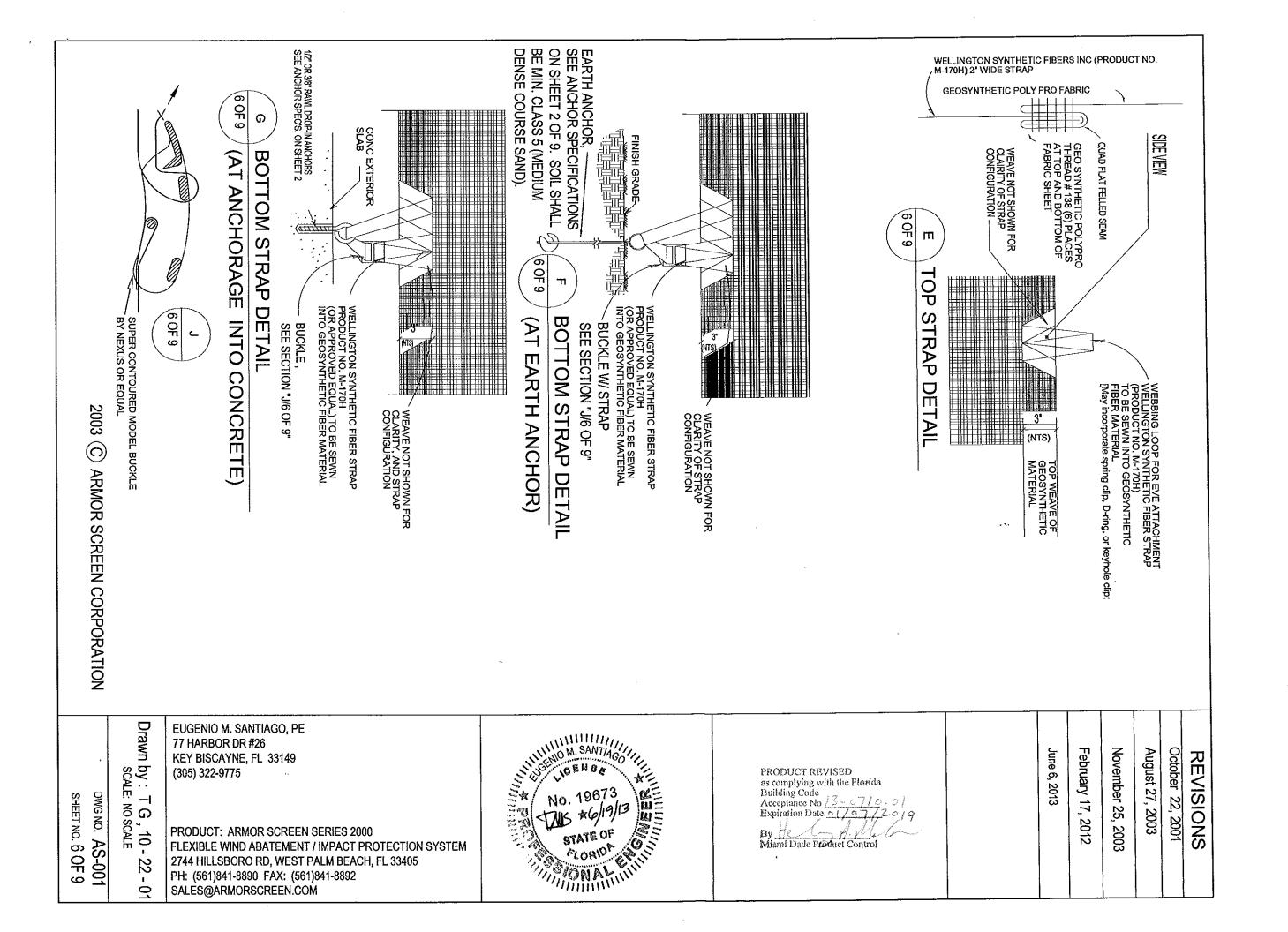
SALES@ARMORSCREEN.COM

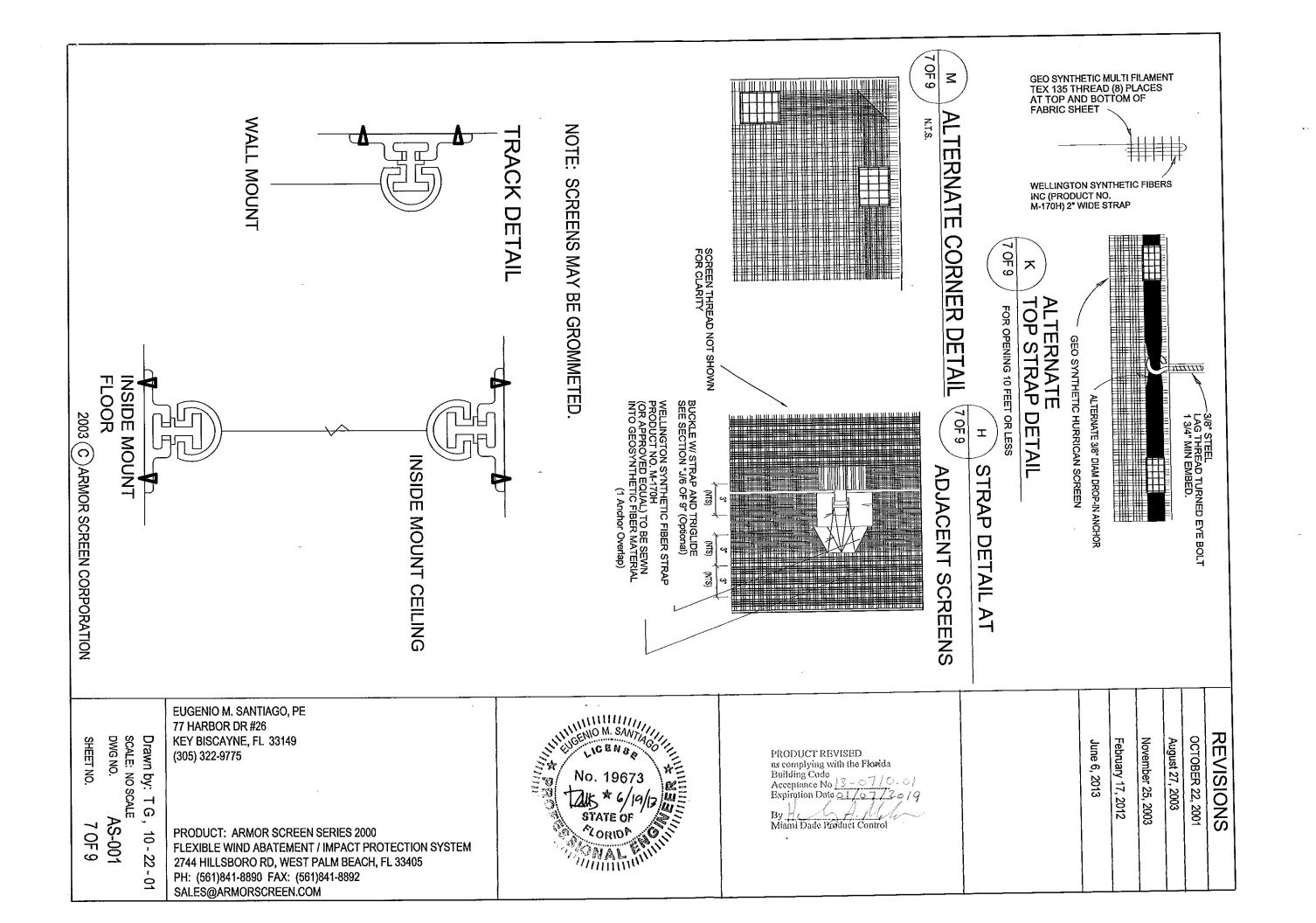
77 HARBOR DR #26

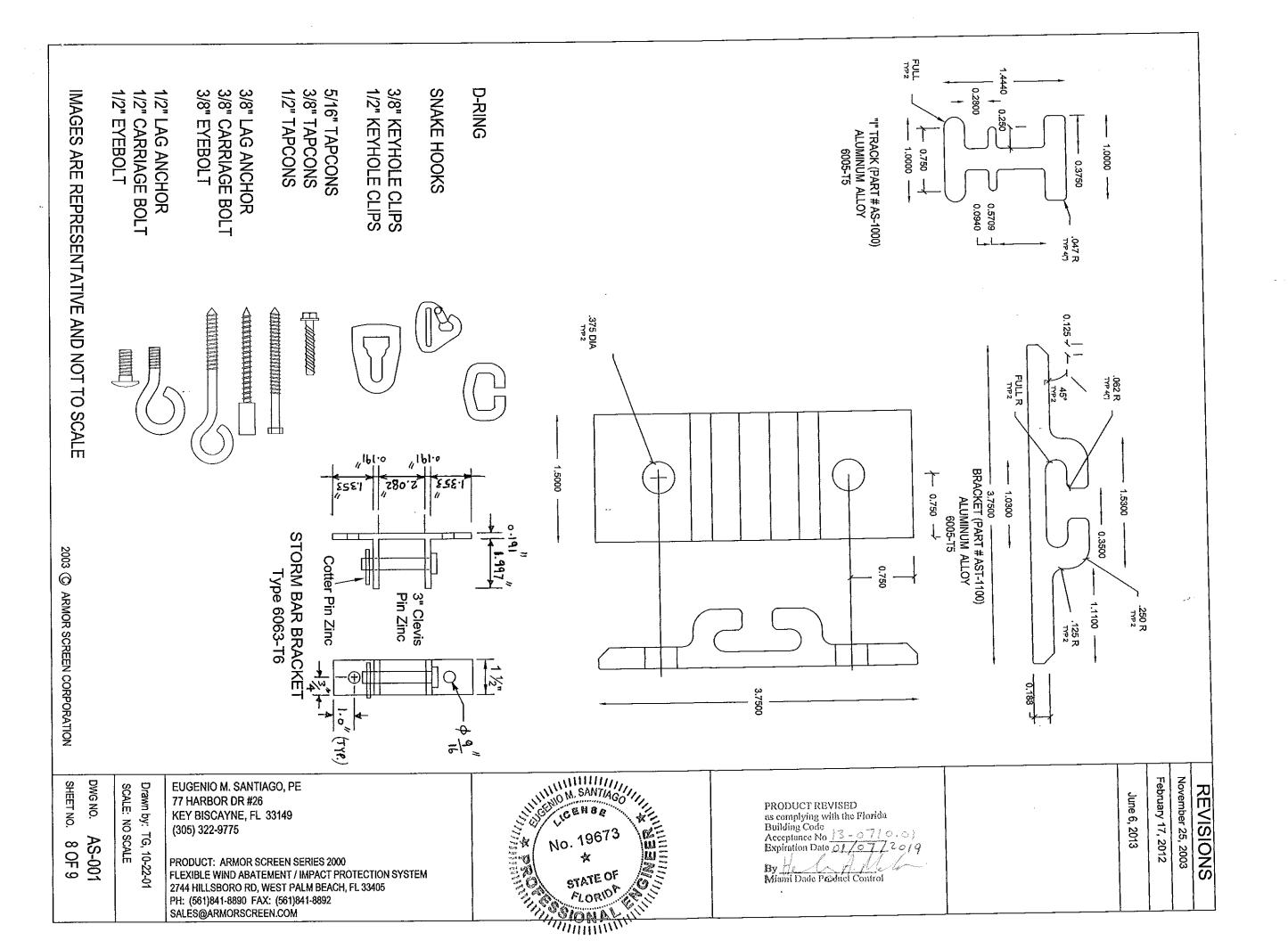












SCREEN SPAN (FT.)														[`		/							
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1308	1250	1197	1144	1086	1034	981	923	870	818	760	712	654	602	543	491	438	380	327	275	217	40		OADING
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1714	1643	1572	1501	1430	1359	1283	1212	1141	1070	999	928	857	786	715	644	574	503	426	355	284	70	DESIGN LOAD (PSF	SCREEN LOADING ON STRUCTURE (PER LINEAR FOOT
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2406	2308	2203	2104	2005	1907	1802	1703	1604	1506	1401	1302	1203	2000	1013	901	802	204	986	200	401	130		
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Ņ Max. deflection to be per NOA as relates to span. Span is measured anchor to anchor and may be reduced by intermediate storm bars, rigid or pneumatic, or mullions. Span proportionately

Notes:

- reduced by intermediate rests such as storm bars or mullions and measured from anchor to proximate storm bar or between proximate
- storm bars.

 Max. PSF to be the absolute value of the greatest pressure.

 Calculations are applicable to any Armor Screen System.
- ω, 4.

No. 19673

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PRODUCT REVISED
as complying with the Plorida
Building Code Building Code
Acceptance No 3-07/0-07
Expiration Date 01/07/2019 REVISIONS

June 6, 2013

By Hamil Dade Product Control

DWG NO. EUGENIO M. SANTIAGO, PE Drawn by: SCALE: NO SCALE 77 HARBOR DR #26 KEY BISCAYNE, FL 33149 (305) 322-9775 TG, 10-22-01

PRODUCT: ARMOR SCREEN SERIES 2000 FLEXIBLE WIND ABATEMENT / IMPACT PROTECTION SYSTEM 2744 HILLSBORO RD, WEST PALM BEACH, FL 33405 PH: (561)841-8890 FAX: (561)841-8892 SALES@ARMORSCREEN.COM

2013 (© ARMOR SCREEN CORPORATION

SHEET NO.

9 OF 9

AS-001